



Filter Focus Newsletter Returns

We are very pleased to present you with this special edition of Filter Focus, National Nonwovens' newsletter to our valued filtration customers and friends.

Although it has been almost three years since our last issue, we returned to share with you the news that our engineers have been diligently working to create targeted filter products. We will continue to solve your filtration challenges and look forward to serving you with our innovative textiles.



Please visit

www.nationalnonwovens.com/filter.htm

for an overview of our Filter Products.

NEW FILTER PRODUCTS

Product	Weight (oz/y ²)	Thickness (inch)	Permeability (cfm)
TFIL31	7.0	.065 - .085	200 - 300
FIL032	5.3	.078 - .094	629 - 787
FIL033	18.0	.130 - .160	80 - 120
FIL034	10.5	.040 - .065	80 - 120

TFIL31: A low density chemically-enhanced stiff prefilter for automotive cabin air filters. This material meets the requirements for Daimler Chrysler MS-LE8-11 Type 3 filter media. The material has a high permeability, meets FMVSS 302 flame resistance, is 100% recyclable and is moldable.

Attributes:

- Low cost
- High permeability
- Flame retardant FMVSS 302
- Moldable
- Recyclable

FIL033: A highly entangled needlepunch polyester superabsorbent nonwoven designed to filter water from jet fuel. The material will create a gel block when exposed to water that will create excessive back-pressure to prevent the contaminated fuel from entering critical fuel tanks. The material is designed to handle flow rates of thirty gallons per minute. The material also filters particles such as surfactants, micro organisms, and solids. The final filter assembly conforms to the Institute of Petroleum AIP IP 1583 (4th edition) specifications.

Attributes:

- Low Cost
- High gel blocking strength
- Uniform

FIL032: A medium density chemically-enhanced stiff resilient polyester needlepunch nonwoven engineered as a prefilter for cabin air filters and carbon canister filters. It is moldable, meets FMVSS 302 flammability requirements, has a high permeability, and is recyclable. It also has sufficient stiffness and flexibility so a screen is not required for support. Can be exposed to gas without loss of physical attributes.

Attributes:

- Low cost
- High permeability
- Good depth loading capacity
- Flame retardant meets FMVSS 302
- Recyclable

FIL034: A highly engineered nonwoven composite designed for jet fuel filtering that prevents any gel from entering the downstream flow of fuel. The material will create a gel block when exposed to water that will create excessive back pressure to prevent the contaminated fuel from entering critical fuel tanks. The material is designed to handle flow rates of thirty gallons per minute. The material also filters particles such as surfactants, micro organisms, and solids. The final filter assembly conforms to the Institute of Petroleum AIP IF 1583 (4th edition) specifications.

Attributes:

- Low Cost
- High gel blocking strength
- Uniform
- Gel containment composite design

2000 BC

The origin of water filtration dates back to ancient Egypt.



As early as 2000 BC, water was passed through a cloth sleeve, which would filter out some of the larger impurities, before drinking. The Egyptians also used a kind of clarifying device, which would allow smaller sediment to settle to the bottom of a large urn, while several siphons removed the upper layer of clear water.

As seen online at...



NATIONAL NONWOVENS MANUFACTURING & TECHNICAL CAPABILITIES

Processing

Web Forming:

- Air Laid
- Carded Crossed Laid

Construction:

- Chemical Bond
- Felted Wool
- Needlepunch
- Thermo Bond

Quality Control

Controlled environment conditioning room ensures optimum quality. State-of-the art laboratory equipment evaluates:

- Weight
- Thickness
- Tensile Strength
- Tear Strength
- Thermal Stability
- Wash & Dry Clean Resistance
- Mullen Burst
- Flame Resistance
- pH
- Chemical Composition
- Color Matching
- Fiber Identification
- Absorbency
- Permeability
- Analytical capability to determine material content and construction

Post Processing

Chemical Enhancement:

- Top Coat
- Saturate
- Wash
- Dye

Mechanical Enhancement:

- Press
- Calendar
- Glaze
- Singe
- Laminate (*Composite/Adhesive Web/Pressure Sensitive Film*)

Customized Processing:

- Slitting (minimum 3/8")
- Die Cut Shapes
- Tow (*finish treatment*) and (*Cut to requirements*)
- Special Packaging as required

Research & Development

- Scaled equipment to replicate production equipment
- Engineered designed fabric support (for containment and ballistic protection)
- Specialized Testing
 - FAR25-853-A&B (vertical burn)
 - FAR25-856-A (radiant panel compliant)
 - Forced loading capability (drop tower)
- Research and Development of new products



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